

Kennecott Minerals Company

A Division of Kennecott Corporation

Utah Copper Division

P.O. Box 6500

Salt Lake City, Utah 84106

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To: Jim

ACT/035/002

April 8, 1982

Kennecott

Mr. Charles R. Henderson, Chairman
Division of Oil, Gas, and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Henderson:

Enclosed is the annual mined land reclamation report for the Utah Copper Division of Kennecott Minerals Company which is being submitted in compliance with the Utah State Mined Land Reclamation Act of 1975.

Yours very truly,

TT Pinder / *WAZ*

T. T. Pinder, Director
Safety, Health and
Environmental Control

MRH/ac
Enclosure

cc: Mr. W. H. Jensen, w/enc.
Mr. R. A. Malone, w/enc.

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MINED LAND RECLAMATION ANNUAL REPORT

OCTOBER 1, 1980 TO OCTOBER 1, 1981

KENNECOTT MINERALS COMPANY

UTAH COPPER DIVISION

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DIVISION OF
OIL, GAS & MINING

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MINED LAND RECLAMATION ANNUAL REPORT
OCTOBER 1, 1980 TO OCTOBER 1, 1981

KENNECOTT MINERALS COMPANY
UTAH COPPER DIVISION

Introduction

The following report is submitted to the Utah State Division of Oil, Gas and Mining as prescribed under paragraph (b), Rule M-8, Utah State Mined Land Reclamation Act of 1975. The report summarizes work performed during the period October 1, 1980 to October 1, 1981 as approved on the Notice of Intention to Commence Mining Operations #Act-035-002, August 9, 1976 and subsequent surety agreement.

Location of Operations

Under the original notice the operations of the Bingham mine and concentrator were conducted in the following sections of Salt Lake and Tooele Counties:

Sec 7, 8, 9, 10, 11, 17, 18, 19, 20, 21, 30, 31 & 32, T1s, R2W, SLB&M; Sec 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26 & 36, T1S, R3W, SLB&M; Sec 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 22, 23, 27, 28 & 33, T2S, R2W, SLB&M; Sec 7, 8, 17, 18 & 19, T3S, R1W, SLB&M; Sec 8, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25, 28, 29, 30, 31 & 32, T3S, R2W, SLB&M; Sec 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 33, 34, 35 & 36, T3S, R3W, SLB&M; Sec 6 & 7, T4S, R2W, SLB&M; Sec 1, 2, 3, 11 & 12, T4S, R3W, SLB&M.

Summary of Mining and Concentrating Operations

Disturbance of the natural terrain during the period was confined to the following sections in Salt Lake County:

Sec 18, 19, 20, 29, 30 & 31, T3S, R2W, SLB&M; Sec 23, 24, 26 & 36, T3S, R3W, SLB&M; Sec 1, T4S, R3W, SLB&M.

During the reporting period, mining and concentrating operations mined and milled an estimated 38,976,200 short tons of ore. An estimated 132,975,500 short tons of waste material were removed from the mine and deposited on waste dumps or used for construction material. Waste material from the concentrating operations was deposited on the division's existing tailing pond. This resulted in a rise in elevation of the tailing pond of approximately four (4) feet. There was no increase in tailing areas (disturbed acreage) as a result of concentrating operations.

Although no new acreage was disturbed in the mine area, waste disposal operations and construction work disturbed an estimated 117.6 acres of previously undisturbed ground. These areas are summarized as follows:

1. Area disturbed by rail waste operations	34.8 acres
2. Area disturbed by truck waste operations	56.9 acres
3. Area disturbed by construction work	25.9 acres
Total	117.6 acres

No other major disturbance of natural ground occurred in the area of the Bingham mine.

Major New Projects in Reclamation Program - 1980-81

Mine: Lark Townsite Seeding.

Concentrator: Bravo Gate Landscape Project.

Tailing Pond: Dike Maintenance Office Landscape and Windbreak Establishment.

Greenhouse: Establishment of Oak Research Program and Disease Control Program for Native Plants.

Monthly Status of Reclamation Work

Mine

Oct. 1980: Stand improvement was continued at evaporation ponds and Castro mudslide area.

Nov. 1980: Inventoried USFS plantings at Copper Notch.

Jan. 1981: Continued tree maintenance in areas requiring site improvement.

Feb. 1981: Continued tree fertilization program.

Mar. 1981: Pruned trees at pipe yard and West Mountain guard shack.

Apr. 1981: Maintained trees at evaporation ponds and Willow Springs. Seeded Lark Townsite which included approximately 200 acres. Seeded Butterfield Road barricades. Planted vegetation in new Copperton Townsite.

May 1981: Fertilized, planted 50 additional trees, and repaired fences at Willow Springs area.

June 1981: Maintained plantings at Willow Springs and evaporation ponds. Planted shrubs at Lark-Copperton erosion control project.

July 1981: Maintained trees and shrubs at areas throughout mine.

Aug. 1981: Maintained trees and shrubs at areas throughout mine.

Sept. 1981: Continued horticultural maintenance of reclamation projects throughout mine area.

Concentrator

Feb. 1981: Pruned trees at Bonneville concentrator. Expanded landscape and shrub maintenance to ore haulage facilities.

Apr. 1981: Continued site improvement at DUP historical monument and Toronto Cave.

May 1981: Fertilized and interseeded strip of highway where ditches had been dredged along 2100 South.

- June 1981: Maintained trees and shrubs at Bravo Gate and DUP monument. Mowed Toronto Cave.
- Sept. 1981: Continued improvement of DUP monument. Planted additional trees at ore haulage (car shop area). Major landscape improvement undertaken at Bravo Gate.

Tailing Pond Berm and Dikes

- Oct. 1980: Seeded and fertilized tailing dike using 1,000 pounds of seed and 8 tons of fertilizer.
- Nov. 1980: Continued seeding and fertilizing slopes of tailing dike.
- Jan. 1981: Planted 100 Bolleana poplars and 100 Shademaster locust trees on slopes of tailing dike. Fertilized fourwing saltbush.
- Feb. 1981: Fertilized all trees and shrubs on slopes of tailing dike. Replaced dead trees. Initiated control of rodent population.
- Mar. 1981: Seeded, fertilized, and pruned trees on dike slopes. Planted trees on southern dike slopes.
- Apr. 1981: Undertook project to control critical dust areas on tailing pond berms. Used silt from tailing pond return canal to cap tailing. This material was then seeded and 200 trees planted. Ongoing site and stand improvement continues.
- June-Aug.
1981: Shrubs and trees maintained on dike slopes.
- Sept. 1981: Landscaped dike maintenance office. Planted two windbreaks for dust control.

Greenhouse

- Oct. 1980: Collected hybrid acorns on Kennecott property for propagation in greenhouse.
- Nov. 1980: Maintained greenhouse and prepared for plant production. Stored acorns for germination.
- Dec. 1980: Made greenhouse modifications.
- Jan. 1981: Continued greenhouse plant production of reclamation materials.
- Feb. 1981: Hybrid acorns germinated. Greenhouse mix and containers modified for hybrid oak. Initiated greenhouse production of browse mix.
- Mar. 1981: Continued plant production and maintenance of reclamation plants.

Apr. and May
1981: Greenhouse production continued. Maintained plant materials
and equipment.

June 1981: Established oak experimental plot at tree farm.

July and Aug.
1981: Maintained tree farm, cold frame plant material and work
area.

Sept. 1981: Planted 150 oak and 200 pine trees in tree farm.

Reclamation Work Cost Summary - October 1, 1980 to October 1, 1981

Material Cost	\$11,734
Labor Cost	55,598
Rental & Equipment Use Cost	<u>1,150</u>
Total	\$68,482